EBOX-3350DX2 Series

EBOX-3350DX2
EBOX-3350DX2-AP
EBOX-3350DX2-C2
EBOX-3350DX2-C2AP

User's Guide

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Owner's Record

The product serial number is located at the rear panel of your EBOX units. Refer to the model type and serial number when you contact your nearest dealer or DMP office for service.

Safety Information

WARNING

- Do not expose EBOX to rain or moisture, in order to prevent shock and fire hazard.
- Never install EBOX in wet locations.
- Do not open the cabinet to avoid electrical shock. Refer to your nearest dealer for qualified personnel servicing.
- Never touch un-insulated terminals or wire unless your power adaptor and display monitor are disconnected.
- Locate EBOX as close as possible to the socket outline for easy access and to avoid force caused by entangling of your arms with surrounding cables from the EBOX.
- When using EBOX, avoid using or installing the modem to the serial port during a storm or a lightning.
- Do not use the modem or a telephone to report a gas leak in the vicinity of the leak.
- USB connectors are supplied with Limited Power Sources.

DO NOT ATTEMPT TO OPEN OR TO DISASSEMBLE THE CHASSIS (ENCASING) OF THIS PRODUCT. PLEASE CONTACT YOUR NEAREST DEALER FOR SERVICING FROM QUALIFIED TECHNICIAN.

Regulatory

FCC Class A Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense. Testing was done with shielded cables. Therefore, in order to comply with the FCC regulations, you must use shielded cables with your installation.

WARNING

This product complies with EN55022 class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference - causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Manufacturer's Declaration of Conformity

This equipment has been tested and found to comply with the requirements of European Community Council Directives 89/336/EEC and 73/23/EEC relating to electromagnetic compatibility and product safety respectively.

Attention

This product has been designed and certified to comply with certain regulatory requirements pertaining to Information Technology Equipment. This product has not been designed for use as a medical device. Without limitation of the foregoing, this product is not intended and has not been certified for use in a hospital or clinical environment to diagnose, treat, or monitor patients under medical supervision, and is not intended and has not been certified to make physical or electrical contact with patients, nor to transfer energy to or from patients and/or to detect such energy transfer to or from patients.

Purchase Agreement

Purpose:

In accordance to the general commercial conduct of Trust and Fair Trade, herewith below is the agreement for the protection for both parties, DMP and Users in pursuant of trading.

Product Description:

With this product, herewith also known as EBOX-3350DX2 Series, which is a simplified & an economical design of an embedded device for Special Purpose Personal Computing. The basic specification of this product is comprised of the x86 technology, design, and with onboard 512 MB DDR2 System memory, VGA display, USB, COM ports and LAN Interfaces.

Distribution Convention:

1. This Product includes a gift box, an inner case, a PC, a Power adaptor (Optional). Upon receiving this product, kindly please refer to the User' Manual to check for the contents and appearance of this product; contact immediately your nearest dealer or DMP office for any defective or missing parts. The supplier will not be responsible for any reported discrepancy there after the expiration period of 3-days from the received date.

2. In consideration of transportation and the cost of storage, the supplier provides to the distributors a warranty of 12 months. This warranty covers the failure caused by hardware breakdown (excluding hard drives), but does not cover the act of misuse and mishandling.

3. The supplier will not accept unknown post, therefore if you wish to repair or to return your goods – kindly please contact your nearest dealer to make your declaration, and at the same time, apply for an RMA number (RMA stands for Return Merchandise Authorization – please ask for RMA form and fill-up for authorization).

4. The freight for return goods for repair will follow the International customary practice and convention: Both parties is to pay for freight of one shipment each. The shipper is required to prepay the freight from the place of origin (This means that the returnee (user) covers the freight for return goods, while the Supplier covers the freight for goods after the repair).

5. Obsolete warranty is referred to as: (1) Expiration of warranty or (2) Damage due to misuse within warranty. The Supplier will be taken into consideration of the circumstances, to provide repair service with charges expense for obsolete warranty. This expense includes the cost of material and the cost of labor.

Note: If there is other particular issue, not listed in the above conditions, both parties agreed to follow the General Law of Commerce with fair and reasonable discussion in handling and resolving the argument.

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Chapter 1

Unpacking Your EBOX Mini PC

Congratulation! You have just acquired EBOX-3350DX2 Series, please check the following items:

Packing List:

Item No.	Description	Q'ty
1	EBOX-3350DX2 Series VESA PC	x1
2	75 x 75 mm to 100 x 100 mm VESA mounting rack (Optional)	x1

Note: The accessories are subject to change without immediate notice.

Check Before Use

1. EBOX-3350DX2 Series Unit

2. VESA rack (Optional)

Preface

EBOX-3350DX2 Series: VESA PC

The EBOX-3350DX2 Series is a revolutionary device which is especially designed for limited physical space and temperature concerns. No matter you are in a jammed office, a crowded place, or public transportation, it can be easily integrated with a VESA LCD to bring you EBOX-3350DX2 Series access at any time.

It can attach to any VESA mounting fixture; allowing it to be securely mounted onto desks, walls, or buildings, and thereby optimizes your work area. It can also attach directly to any size LCD for a mobile system for the use at trade shows, presentations, promotions, etc. Unlike traditional portable laptop design, the EBOX-3350DX2 Series can be used with a large size LCD. Furthermore, with FANLESS design, EBOX-3350DX2 Series is ideal to be used in the environment where temperature demand is critical.

If you are looking for a device that is able to provide with more mobility & space, and at the same time uses less power consumption, EBOX-3350DX2 Series will be surely meet your need.

The VESA® FDMI™ Standard defines mounting interfaces, hole patterns and associated cable/ power supply locations for LCD monitors, plasma displays and other flat panel devices. EBOX-3350DX2 Series is designed to fit this standard to make monitor attachment quickly and easily.

Chapter 2

EBOX-3350DX2 Series Overview

Front Panel

A: Reset Button
For system reset or turn on.
(Available in 3350DX2/ 3350DX2-C2).

B: Power LED
The power LED lights up when the system is turned on.

C: Audio Line Out
Audio output to speaker.

D: Audio Mic In
For Microphone input.

E: USB v2.0 ports
For connection to devices with USB Interface such as CD/ DVD-ROM, USB HDD, etc.

F: SD Slot
For the storage SD card, the system is bootable from SD card.

Back Panel

G: USB V2.0 port

H: VGA port D-Sub 15-pin

I: RJ-45 LAN Jack

J: Power Jack

K: RS-232 port
* Available in EBOX-3350DX2-C2/ C2AP

System Specification

CPU

Vortex86DX2 (933MHz)

Main Memory

512MB DDR2 (32-bit DRAM bus)

BIOS

AMI BIOS

VGA

Resolution up to 1920 x 1440 High Colors

Peripheral

1. USB V2.0 x 3 (2 at front, 1 at rear)
2. SD card slot x 1
3. Audio (Mic In, Line Out)
4. RS-232 port x 2
   (Available in EBOX-3350DX2-C2/ C2AP)

Dimension & Weight

EBOX-3350DX2/ AP

95 x 95 x 20 mm/ 277g

EBOX-3350DX2-C2/ C2AP

95 x 95 x 35 mm/ 350g

Power consumption

+5VDC@1100mA

Operating System

Windows XP Embedded

Windows Embedded CE

Supported Linux Distribution list:

1. Gentoo 4.2
2. Ubuntu 8.04
3. Ubuntu 8.10
4. Ubutnu 9.04
5. Ubuntu 10.04
6. Debian 4.0
7. Debian 5.0
8. Debian 6.0
9. Debian 7.0
10. OpenSUSE 11.4
11. Fedora Core 5
12. Fedora 10
13. WattOS warp30 (Ubuntu 8.10 base)
14. CentOS 5.5

※ Red letters: Standard IDE compatible option enable could help for install directly

※ CentOS 5.5: Please use regular PC to install the OS into SD card, then, remove the SD card onto the EBOX units.

Peripherals

Connecting the Power Adaptor

A: DC Power Jack

To use EBOX-3350DX2 Series immediately, please attach the USB cable or supplied AC adapter for the power source.

Note: With the Auto Power On support function (Optional), the system then will be turned on automatically.

Connecting the Monitor

B: VGA Connection

Make your LCD display connection with the VGA cable to the 15-pin D-Sub VGA port.

Peripherals

Connecting the USB

EBOX-3350DX2 series provides 3 external USB ports (2 at the front, 1 at the rear).

C: SD Slot

For booting device by SD Card.

D: Microphone/ Earphone

The EBOX-3350DX2 Series supports Microphone Input and Speaker Output

E: Reset Button

For system reset or turn on
Note: Models with Auto Power On feature has Reset Button Eliminated.

F: USB Ports

The USB ports are available for connection to USB devices such as CD-ROM/ USB Drive.

Connecting the LAN

G: RJ-45 LAN

There is an available RJ-45 LAN jack for Ethernet connection.
(see left diagram for RJ-45 Jack).

Connecting Serial port

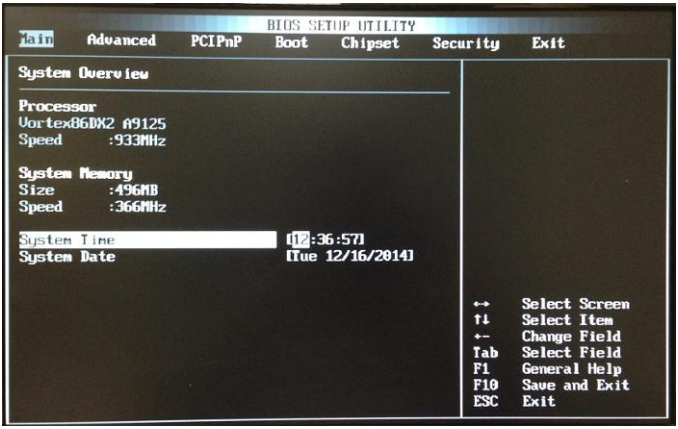
H: Serial Ports (Available in EBOX-3350DX-C2/ C2AP)

The serial port is usually connected to a serial device like modem or terminal devices.

Chapter 3

BIOS Reconfiguring

1. AMI BIOS is used in the EBOX-3350DX2 Series. To reconfigure the EBOX-3350DX2 Series, press the <Del> key after power turn on to enter the BIOS setup main menu.
2. Select from the menu, the desired setup to change.
3. Press <Esc> to go back to main menu.
4. Press <F9> to load factory default setting.
5. Move to “Exit” TAB and select “Save Settings and Exit”, press “Y” to save the changes that you just made. EBOX-3350DX2 Series will restart accordingly to your new setup.



(AMI BIOS Setup menu)

Linux installation For Debian7.0/ Ubuntu10.04

Regarding the system installation of Debian7.0/ Ubuntu10.04, please follow the steps and suggestions to complete the system installation on the EBOX-3350DX2 Series platform. There we provided is a brief instruction to assist clients, but you can configure it by yourself with system's asking.

1. Configuration of BIOS

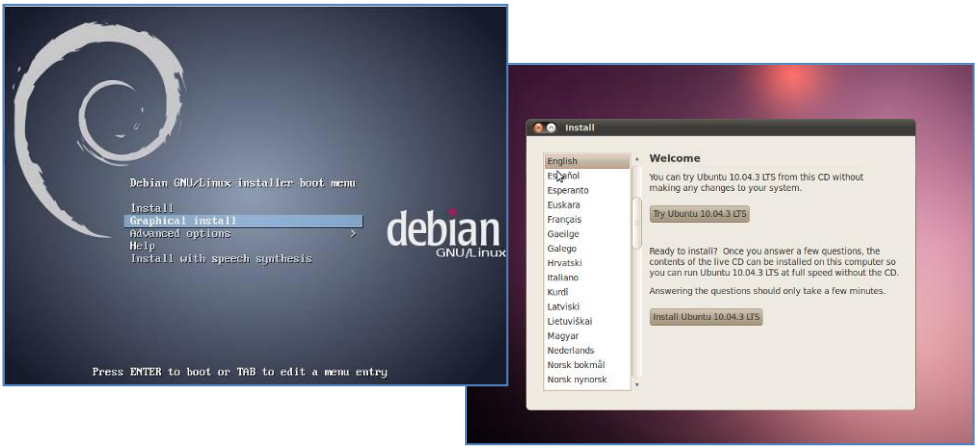
- The first step is to ensure BIOS has correctly configured that necessary function was enabled for IDE device. (for Debian7.0 especially)

Advanced
IDE Configuration
OnBoard PCI IDE Controller [Both]
* Primary IDE Master [Not Detected]
* Primary IDE Slave [Not Detected]
* Secondary IDE Master [Not Detected]
* Secondary IDE Slave [Not Detected]
Hard Disk Write Protect [Disabled]
IDE Detect Time Out (Sec) [35]
ATA(PI) 80Pin Cable Detection [Host & Device]
IDE Operate Mode [Legacy Mode]
PCI IDE BusMaster [Enabled]
Primary IDE Pin Select [Parallel IDE]
Hard Disk Delay [2 Second]
Standard IDE Compatible [Enabled]
IDE Compatible Selection [808624DB]
Options
Disabled
Enabled
** Select Screen
** Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
v02.69 (C)Copyright 1985-2010, American Megatrends, Inc.

- Keep pressing the key <Del> can assist entering BIOS when the power turned on. The BIOS functions you need to check locate Advanced \ IDE Configuration \ Standard IDE Compatible. Set as Enabled.

2. Basic system installation

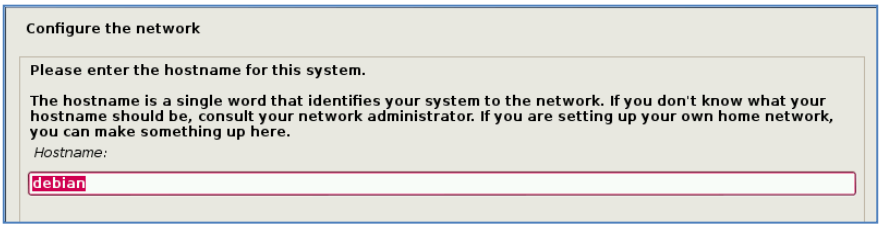
- For Debian7.0, after booting from the installation CD, moving straight to install system would get a text only system, please choose Graphic Install if GUI is necessary for your application.



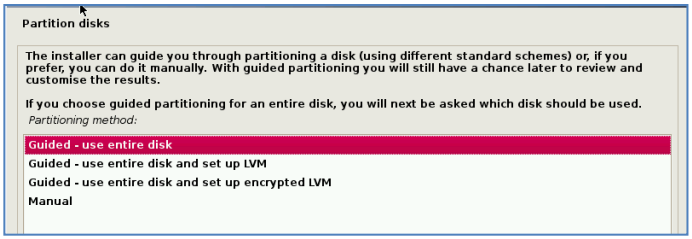
- The system would start to ask questions for basic configuration. Such as the language, keyboard map and time zone, etc.

- Then the system information appears for something about the detecting of network hardware, system requires users to load the firmware files for network device rtl8168, just answer no for this inquiry and move forward.

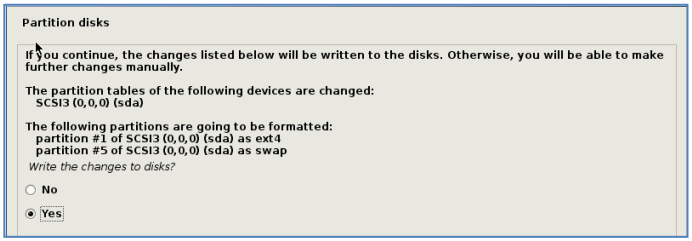
- Then the system would inform you that multiple network interfaces were detected on the EBOX-3350DX2 Series, and the user to choose the one as primary network interface, both of them all could be chosen. And the Ethernet cable must be plugged in this period.


Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
debian

- As installation processing, the system would need you to make decisions about how the partitions your disk for the system? Following default option is using entire disk for the beginner. Choose “all files in one partition”. Other allocation is also available, depends on customers’ needs.

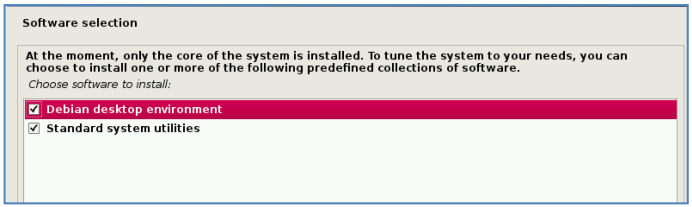

Partition disks
The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual

- In the final, remember to write the change to disk.

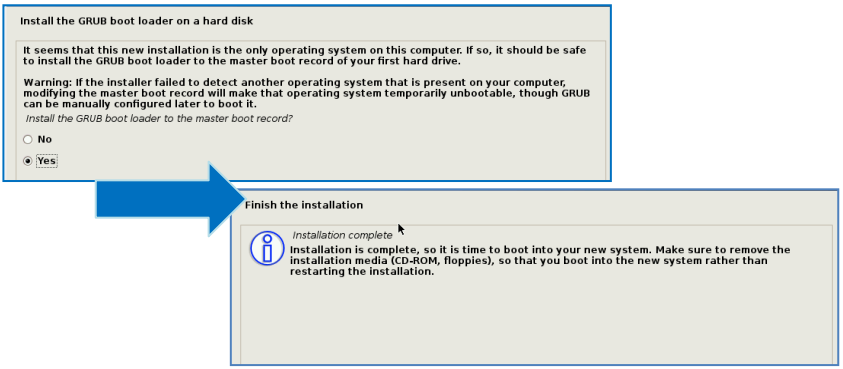

Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI3 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #1 of SCSI3 (0,0,0) (sda) as ext4
partition #5 of SCSI3 (0,0,0) (sda) as swap
Write the changes to disks?
No
Yes

- Then the system would keep asking you few questions for configuration, suggestions were attached as follow.

- When system asking you to choose the software to install for system, you can remark both the Debian desktop environment and standard system utilities, then to continue following procedure. It would start the package installation, around hundred packages would be installed, please be patient until system informed you for the next step.

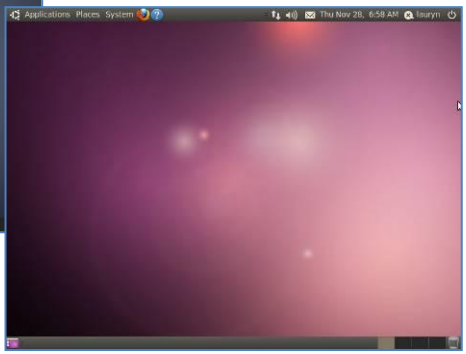

Software selection
At the moment, only the core of the system is installed. To tune the system to your needs, you can choose to install one or more of the following predefined collections of software.
Choose software to install:
Debian desktop environment
Standard system utilities

- The next question is about the agreement of the installation of the GRUB boot loader to the MBR area? Answer YES and wait system to complete the installation as last procedure.


Install the GRUB boot loader on a hard disk
It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.
Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.
Install the GRUB boot loader to the master boot record?
No
Yes
Finish the installation
Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.

- When it's completed, the disc tray will eject and inform you, then press continue to restart and be ready to enjoy the new system!

The Debian7.0



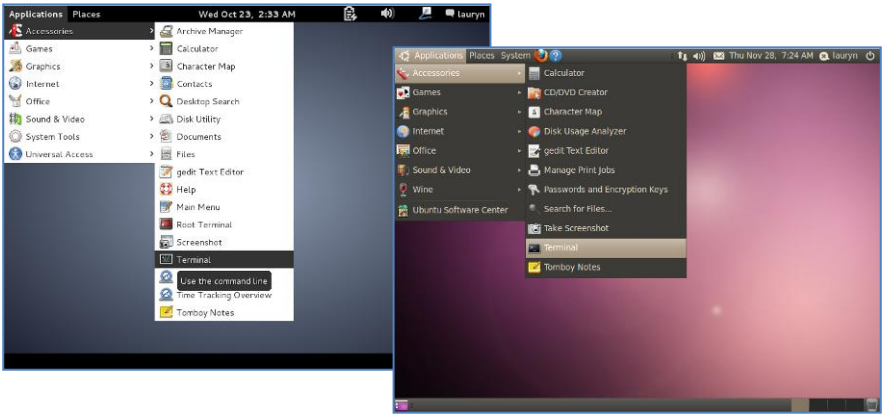
The Ubuntu10.04

3. Kernel and graphic driver installation

Install the Kernel Package (Console mode)

- For Debian7.0, you can skip this procedure for kernel installation; Because system could work with default kernel version (3.2.0).

- Clicking the icon of the terminal from the application. And download the kernel 2.6.32-21 from below link then to store the kernel package.

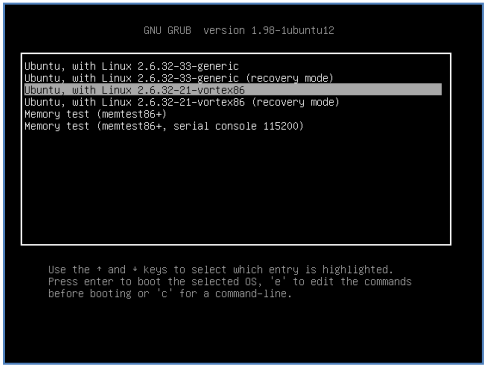


- Follow the instructions to complete the kernel installation, get into the folder that kernel file stored, and switching as the root before command executed.

```
# dpkg -i linux-image-2.6.32-21-vortex86_2.6.32-21.32_i386.deb
```

Kernel Package (click 2.6.32-21-Vortex86)

- When download completed, restart the system and to choose the kernel 2.6.34.10 to boot when GRUB boot loader was loaded. You can keep pressing the key “Shift” when the system from booting, then the boot loader would show the option of kernel for you. Then find the “Ubuntu, With Linux 2.6.32-21-vortex86” to execute.


GNU GRUB version 1.98-1ubuntu12
Ubuntu, with Linux 2.6.32-33-generic
Ubuntu, with Linux 2.6.32-33-generic (recovery mode)
Ubuntu, with Linux 2.6.32-21-vortex86
Ubuntu, with Linux 2.6.32-21-vortex86 (recovery mode)
Memory test (memtest86+)
Memory test (memtest86+, serial console 115200)
Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.

- Or you can remove the default kernel 2.6.32-??-generic that be arranged as a higher priority than the kernel we installed for the EBOX-3350DX2 platform, with the instruction below through the terminal.

- First, check what version be installed as default in the system:

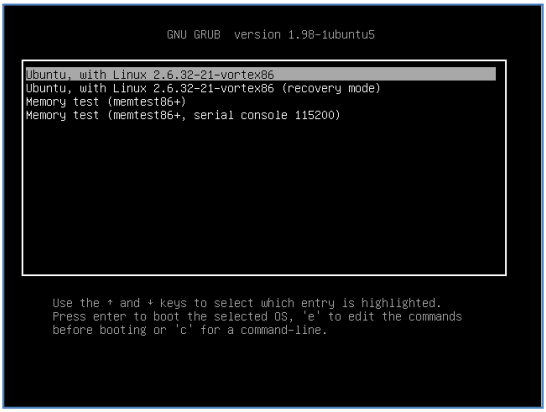
```
# grep –w linux-image-2.6.32 /var/log/dpkg.log
```

- To find the last two numbers as location of question marks that the system shows on screen “linux-image-2.6.32-??

- Then execute it with the correct numbers that you found in previous, and to replace the question mark with correct version numbers shown below.

```
# apt-get remove linux-image-2.6.32-??-generic
```

- Then you would see only one kernel on the GRUB list.


GNU GRUB version 1.98-1ubuntu5
Ubuntu, with Linux 2.6.32-21-vortex86
Ubuntu, with Linux 2.6.32-21-vortex86 (recovery mode)
Memory test (memtest86+)
Memory test (memtest86+, serial console 115200)
Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.

Install the VGA driver (Console mode)

- Switch to console mode by pressing key <Ctrl> + <Alt> + <F1>, then copy the VGA driver rdc_drv.so to the driver folder /usr/lib/xor/modules/drivers/, before that, you can download the driver from links below for Debian7 and Ubuntu10.04 individually.

The Ubuntu10.04 Xorg Version is **1.7.6**
The Debian 7.0 Xorg Version is **1.12.4**

VGA Driver (click M2012_R0.04 to download) for Ubuntu 10.04

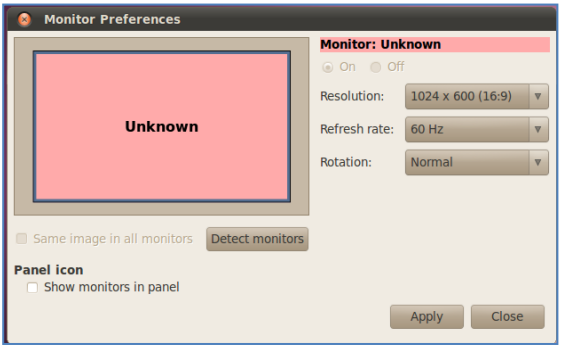
VGA Driver (click M2012_T0.0.9.1 to download) for Debian 7.0

- Follow instruction below to execute.

```
#/etc/init.d/gdm stop
#X –configure
#cp /root/xorg.conf.new /etc/X11/xorg.conf
#/etc/init.d/gdm restart
```

※Please click xorg.conf to download for your system, if the display is out of range.

- Reboot and make sure all the display is normal then set the resolution as requested.



The supported resolutions:

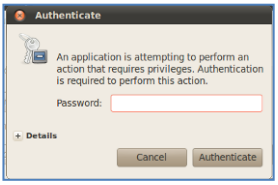
1920x1200 (16:10)	1400x960	1280x768 (16:10)
1920x1080 (16:9)	1280x1024 (5:4)	1280x720 (16:9)
1600x1200 (4:3)	1440x900 (16:10)	1024x768 (4:3)
1680x1050 (16:10)	1280x960 (4:3)	800x600 (4:3)
1400x1050 (4:3)	1366x768 (16:9)	640x480 (4:3)
1440x960 (3:2)	1360x768 (16:9)	

4. The system configuration

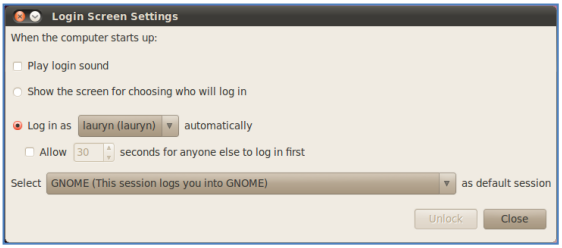
Enable the Auto login

System / Administration / Login Screen

1. Execute the utility “Login Screen” and enter the password to process it.



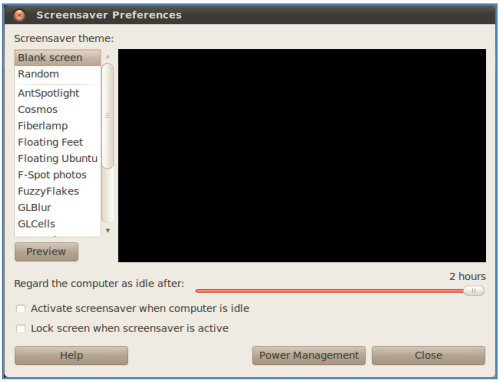
2. Set the Log in as “user account” automatically.



Disable the power saving mode when system idle,

System / Preference / Screensaver

Unmarked the option “Active the screensaver when computer is idle”.



Now, it is a workable Linux system for your EBOX-3350DX2 Series.

Chapter 4

Technical Specification

Model Type	3350DX2	3350DX2-AP	3350DX2-C2	3350DX2-C2AP
Processor	Vortex86DX2 (933MHz)			
BIOS	AMI BIOS			
Memory	Onboard 512MB DDR2			
VGA	Integrated Graphics Chip/ D-Sub 15-pin			
Ethernet	10/100 Mbps LAN x 1 (RJ-45 connector, Built-in PXE diskless boot)			
USB 2.0	External: 3 ports (Front x 2, Rear x 1)			
Audio	Mic in and Line out			
SD slot	1x			
RS-232	N/A		2x	
Auto Power On	N/A	Yes	N/A	Yes
Power	DC +5V @ 2A			
Dimensions	95 x 95 x 20 mm		95 x 95 x 35 mm	
Unit Net Weight	277g		350g	
Operation Temp.	5 ~ 50℃			
Certifications	CE, FCC, VCCI			
Optional	Internal SD card slot			
Note	RS-232 COM ports in Full 9-pin			

Note:
1. SD Slot x 1 (Bootable but hot-swappable not support).
2. Power Supply 10W Micro USB EU and US Type offer to sell as extra spare parts.

EBOX-3350DX2 Series Models Listing:

EBOX-3350DX2: Standard Version.
EBOX-3350DX2-AP: Standard Version with Auto Power On Support.
EBOX-3350DX2-C2: Standard Version with RS-232 port x 2.
EBOX-3350DX2-C2AP: Standard Version with RS-232 port x 2 & Auto Power On Support.

Note:
"AP" indicated Auto Power On supported feature by which system will be turned on automatically whenever power is supplied.

Chapter 5

Onboard Connectors Summary

Summary Table for CPU Board			
Nbr	**Description**	**Type of Connections**	**Pin nbrs.**
J3	VGA	D-Sub Connector	15-pin
J4	DC +5V Input	Mini USB Jack	1-pin
J5	Line out	Audio Jack	2-pin
J6	Mic in	Audio Jack	2-pin
J7	USB (Front)	USB Connector	8-pin
J8	USB (Front)	USB Connector	8-pin
J10	USB (Back)	USB Connector	8-pin
J12	Ethernet LAN	RJ-45	8-pin
J13 **(Note)**	COM1 Port	Box Header 5 x 2 2.0mm	10-pin
J14 **(Note)**	COM2 Port	Box Header 5 x 2 2.0mm	10-pin

Note: J13 & J14 only available in EBOX-3350DX2-C2/ C2AP

Front Connectors Outline

A: Reset Button
B: Power LED
C: Line out
D: Mic in
E: USB V2.0
F: SD Slot

EBOX-3350DX2/ AP FRONT LOOK

*Models with Auto Power On feature do NOT have front Reset Button

EBOX-3350DX2-C2/ C2AP FRONT LOOK

Rear Connectors Outline

EBOX-3350DX2/ AP REAR LOOK

G: USB V2.0
H: VGA
I : RJ-45 LAN
J : DC Power Jack

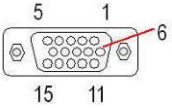
EBOX-3350DX2-C2/ C2AP REAR LOOK

K: RS-232 Port

*Only Available in EBOX-3350DX2-C2/ 3350DX2-C2AP

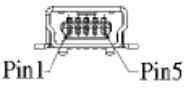
Pin Assignments

J3: VGA – 15-pin D-Sub Connector



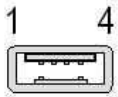
Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name
1	MR	6	GND	11	NC
2	MG	7	GND	12	VCC
3	MB	8	GND	13	HYSYNC
4	NC	9	NC	14	VSYNC
5	GND	10	GND	15	VCC

J4: Mini USB DC Power Input



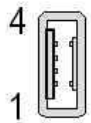
Pin #	Signal Name
1	+5V Input
2	USB In -
3	USB In +
4	None

J7, J8: USB : For connection to external USB device – 4-pin USB Type 1 Connector (H)



Pin #	Signal Name
1	VCC
2	USB2-
3	USB2+
4	GND
5	NC
6	NC

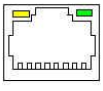
J10: USB (90^{o}) – For connection to external USB device – 4-pin USB Type 1 Connector (H)



Pin #	Signal Name
1	VCC
2	USB0-
3	USB0+
4	GND
5	GGND
6	GGND

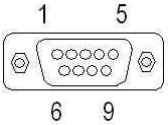
Pin Assignments

J12: LAN: RJ-45 Connector



Pin #	Signal Name	Pin #	Signal Name
1	FTXD+	2	FTXD-
3	FRXIN+	4	NC
5	NC	6	FRXIN-
7	NC	8	NC

J13, J14: COM - 9-pin D-Sub Connector



Pin #	Signal Name	Pin #	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	- -	- -

LEDS: POWER ON/ OFF

	LED Color	State
	Green	Power On

Chapter 6

Taking Care of your EBOX

This section gives you some guidelines on using EBOX-3350DX2 Series – Safe using, Storing and Handling.

Storing

- Do not place EBOX-3350DX2 Series in a location that is subject to:
  - Heating sources, such as stove, oven, heater, radiator or air duct.
  - Direct contact from sunlight.
  - Rain or moisture area.
  - Excessive dust accumulation area.
  - High humidity place.
  - Constant or occasional mechanical movement, vibration or shock.
  - Strong magnets or magnetic fields or magnetically unshielded speakers.
  - Ambient temperature of more than 122^{O}F (50^{O}C) or less than 41^{O}F (5^{O}C).

- Do not place other electronic device or electrical equipment near EBOX-3350DX2 Series. The electromagnetic field of the EBOX-3350DX2 Series may cause interference subjecting to malfunction.

- Provide adequate air ventilation (circulation) to prevent internal buildup of heat. Do not place EBOX-3350DX2 Series near the wall, behind the curtains or draperies, in between two books that block its ventilation slots. Leave a space of at least 8 inches (20cm) behind the sides and back panel of the EBOX-3350DX2 Series.

- Change of environmental temperature: Problems may occur when there is a sudden change of environmental temperature, or if the EBOX-3350DX2 Series is brought directly from a cold location to a warm one, moisture may condense inside EBOX-3350DX2 Series. Turn off the device, and contact your nearest dealer.

- Check the surrounding appliance(s) before using EBOX-3350DX2 Series. Since the EBOX-3350DX2 Series uses high-frequency radio signal and may interface with radio or TV reception causing interference or poor signal display. When this happens, relocate the EBOX-3350DX2 Series by a suitable distance away from it.

- Do not drop the EBOX-3350DX2 Series from working table nor place heavy objects on top of it.

Using Cables for Connection

- To avoid the problem, use only the specified interface cables in your accessory bag. The supplier will not be responsible for the connection arising from the other unspecified peripheral equipment.
- Do not use cut or damaged cables for connection.

Cleaning Your VESA PC

- Clean the VESA PC with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution.
- Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene, as these may damage the finish of EBOX.
- When a solid object falls or a liquid spills onto the EBOX, turn off the EBOX immediately and unplug the LAN and power cables. Contact a qualified person or your dealer to check the EBOX before you use it again.
- Always disconnect the power cord from the power source before cleaning the EBOX.

Troubleshooting

This section describes the techniques of resolving some basic problems that you encounter when using EBOX-3350DX2 Series. For more troubleshooting guidelines, please contact your nearest dealer for technical support.

Troubleshooting Your VESA PC

A. VESA PC does not start –

- Make sure the EBOX-3350DX2 Series is properly secured and plugged into a power source before it is turned on. Make sure the power indicator shows the power is on. See section 2 for more information about "EBOX-3350DX2 Series Overview".
- When the EBOX-3350DX2 Series is plugged into a power strip or the UPS (Uninterruptible Power Supply), make sure the power strip or UPS is turned on and working normally.
- Check if your VGA or LCD monitor is properly plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the manual that came with your display (monitor) for details.
- Check if your power control button does not function, by removing the AC adaptor. Wait for one minute, and then reattach all power connection before pressing the power button.
- Condensation may cause the EBOX-3350DX2 Series to malfunction for a while. If this happens, do not use the EBOX-3350DX2 Series for at least one hour.
- When you have checked all the above guidelines and the EBOX-3350DX2 Series does not work. Remove the power adaptor from the EBOX-3350DX2 Series, unplug the power supply, and plug it in again. Then turn on the power.

B. BIOS Error Message –

BIOS error message appears when my VESA PC starts

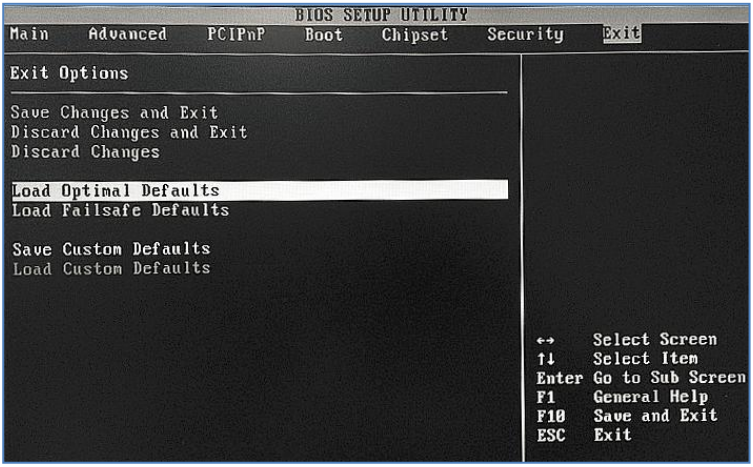
If the BIOS error message appears, press any key to resume or, hit <DEL> to enter BIOS setup main menu, follow these steps:

1. Press <DEL>, and the BIOS Setup main menu appears, check if HDD is detected. If it is not detected, use Direction keys <↑↓> to choose "AUTO" and then go back to the main menu by pressing <ESC>. Move your cursor down with Direction keys <↓>, and choose "Save Settings and Exit", a message dialog appears as seen below, hit <Enter>.

   "Save current settings and exit (Y/N)? Y"

2. Go to “Exit” menu using the Direction keys <↑↓> and choose the option “Load Optimal Defaults”, then press <Enter>. A message dialog appears as seen below, hit “Y” key and presses <Enter> to save and recover to the factory setting.

“Load Optimal Defaults (Y/N)? Y”



(BIOS Setup menu “Exit”)

C. “Operating System Not Found” –

A message indicating that “Operating system not found” appear when my VESA PC starts (Windows won’t start)

- Enter your BIOS setup main menu by pressing <DEL> key, be sure that the C: drive is enable.

- If Windows still does not start, follow these steps to initialize the BIOS:
  1. Turn off the EBOX-3350DX2 Series.
  2. Remove any peripheral devices connected to the EBOX-3350DX2 Series.
  3. Restart the EBOX-3350DX2 Series.
  4. Press <**DEL**> to enter **BIOS Setup main menu** window.
  5. Follow the steps as written in item **B. BIOS** error message.

- If you have just connected EBOX-3350DX2 Series to a CD/ DVD or USB Drivers, remove these peripherals. And restart to confirm that the Windows operating system starts properly. If EBOX-3350DX2 Series continues to display the message ”Operating system not found,” and Windows does not start, please contact your nearest dealer for servicing.

Chapter 7

Terms and Conditions

Warranty

The warranty terms for EBOX-3350DX2 Series are twelve (12) months from the shipped month. During the warranty period, DMP Electronics Will repair replace the product covered under this limited warranty.

Service and Support

DMP Electronics Inc. provides the technical support for hardware problems with your system throughout the warranty period. The technical support service is limited to configuration and operation of EBOX-3350DX2 Series sold by DMP Electronics Inc. The technical support service does not offer software tutoring or training.

Return Merchandise Authorization（RMA）policy

If the DMP staff or dealer determines that a part is defective. Purchaser must call our technical support service to obtain an RMA number before attempting to return any part. Please refer to your nearest dealer for :

To obtain an RMA number, Purchaser must follow procedures as below ：

1. Complete the DMP Electronics Inc. standard RMA Form and fax back to the RMA Department.
2. The RMA Number must be used within 7 DAYS.
3. The RMA Number must be shown clearly on your shipping label.
4. DMP Electronics Inc. must receive all Returns before a replacement will be sent.
5. The repair cost depends on the parts, the damage reasons, and whether under warranty period…etc. The Seller will charge the Purchaser in a reasonable price.
6. A copy of the invoice for the RMA product(s) will also be shipped to Purchaser.
7. The freight of return to DMP Electronics Inc. is charged to the Purchaser's account and accompanied by an RMA number. Any Returns with freight collect will be refused and returned to you. After Repairing, the cost of freight will be paid by Seller.
8. DMP Electronics Inc. must receive all returned goods within the warranty period.

Shipping Policy

The Purchaser must pre-pay shipping for any defective system or parts returned under the warranty. DMP Electronics Inc. shall not be liable for risk of loss or damage during shipment of your returned system or parts if you fail to insure the shipment.

All products must be shipped back to DMP Electronics Inc. in original or equivalent packaging. DMP Electronics Inc. will ship the repaired or replacement product(s) to the Purchaser by freight prepaid. Purchaser assumes the risk of loss. DMP Electronics Inc. shall not be responsible for failure of the delivery service to make on-time delivery.